Amendments to the Specification

Please amend paragraph [0013] as follows.

[0013] The aim of the present invention is to eliminate the need to remove aniline filtrates from the purification ~~amine hydrochloride by filtration, by crystallization from petroleum ether~~, as well as to obtain 2-mercaptobenzothiazole with required quality and yield in a simpler way.

Please amend paragraph [0030] as follows.

[0030] 100 g of aniline filtrate from crystallization F_{k2} (containing 78 % of aniline, 9.5 % of 2-mercaptobenzothiazole) were charged into a pressure 300 ml reactor together with 27 g of sulphur, 67 g of carbon disulphide and 9 g of volatile fractions from the preceding purging of the melt (containing 30 % of aniline and 65 % of benzothiazole). Under conditions usual for this synthesis (220 to 300 °C/6 to 11.1 MPa) a melt of the raw product was prepared. After reaction the reactor was cooled down to 180 to 200 °C and the reactor content was purged at 200 °C by nitrogen stream, removing the volatile fractions.

Please amend paragraph [0032] as follows.

[0032] After cooling down the crystallized 2-mercaptobenzothiazole product was filtered off, from ~ 295 g of the filtrate 5 % F_{k1} were removed out of the process (waste), 100 g F_{k2} were used as a charge of the next batch in the reactor and the remaining filtrate F_{k3} was used in the next crystallization. Wet aniline cake containing 2-mercaptobenzothiazole was wash separated in 91 g of pure aniline, filtered off, aniline was removed from it by wash separation in hot water and by purging with water steam, and dried. The filtrate from wash separation, consisting in general only of aniline and 2-mercaptobenzothiazole, was used in the next crystallization.

Please amend paragraph [0037] as follows.

[0037] 161 g of purged melt were obtained containing 92.2 % of 2-mercaptobenzothiazole, 1.8 % of benzothiazole, 1.3 % of sulphur, 0.7 % of anilidobenzothiazole, 0.1 % of thiocarbanilide, 0.05 % of 2-methylbenzothiazole and 3.85 % of unidentified substances. The melt was dissolved in a mixture of 222 g of filtrate F_{k2} from the preceding crystallization and 200 g of filtrate F_R from the preceding refinement. After cooling down the crystallized 2-mercaptobenzothiazole was filtered off, from the filtrate 20 % were removed out of the process, 80 g were separated for the next batch in the reactor and the rest for the next crystallization. Wet aniline product cake was wash separated in 115 g of pure aniline, filtered off, cleared of aniline, and dried. The filtrate from wash separation was used in the next crystallization.

Please amend paragraphs [0039] to [0041] as follows.

[0039] Into a tube reactor of 5 mm diameter and 15 m length (V = 295.5 ml) with a pressure control valve at the end 83 g of aniline filtrate of the composition as in Example ~~1~~ 2 and further 22.5 g of sulphur, 56 g of carbon disulphide and 8 g of benzothiazole from purging were charged (169.5 g altogether). The retention time was 1 hour 44 minutes. Under conditions usual for this synthesis (250 to 300 °C/6 to 11.1 MPa) a melt of raw 2-mercaptobenzothiazole was obtained which was after removing hydrogen sulphide purged with nitrogen at 200 °C. After 1 hour and 12 minutes 162 g of purged melt were obtained containing 91.2 % of 2-mercaptobenzothiazole and having further composition similar to that of the raw product from Example ~~1~~ 2.

[0040] Crystallization and final purification were performed identically as in Example ~~1~~ 2. 136.5 g of the product with purity of 98.5 % were obtained, representing 91 % yield with respect to 2-mercaptobenzothiazole in the melt.

Example 6

[0041] The weights of raw materials and recycled media in the reactor were identical with those in Example ~~4~~ 5, also the amount of obtained purged melt and crystallization conditions were the same.